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Attorney Docket No.FREL.P-041-DV-2:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Tiefenthaler  
Serial No.: 10/710,609  
Confirmation: 4608  
Filed: July 23, 2004  
Title: Optical Sensor and Optical Process for the Characterization of a Chemical or Bio-Chemical Substance.

**SUBMISSION OF INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


Sir:

Applicants request that the references listed on Substitute Form PTO-1449, which is enclosed, be made of record in the Patent Office file relating to the above-captioned application. Copies of the non-US patent references are provided herewith.

No fee is believed to be due with this paper as we have not received an action on the merits. The Commissioner is authorized to charge any fees which may be due to Deposit Account Number 15-0610.

Respectfully submitted,

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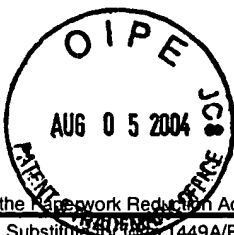
**CERTIFICATE OF MAILING UNDER 37 CFR §1.8(a)**

I hereby certify that this paper and the attachments named herein are being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on \_\_\_\_\_

August 2, 2004.

8.2.04  
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Lori South



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/710,609
Filing Date	7/23/2004
First Named Inventor	Tiefenthaler
Art Unit	
Examiner Name	
Attorney Docket Number	FREI.P-041-DV-2

Sheet 1 of 2

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-4,815,843	03/28/1989	Tiefenthaler et al.	
		US-4,877,747	10/31/1989	Stewart	
		US-4,952,056	8/28/1990	Tiefenthaler	
		US-5,047,213	9/10/1991	Finlan et al.	
		US-5,071,248	12/10/1991	Tiefenthaler et al.	
		US-5,455,178	10/3/1995	Fattinger	
		US-5,479,260	12/26/1995	Fattinger	
		US-5,573,956	11/12/1996	Hanning	
		US-5,738,825	4/14/1998	Rudigier et al.	
		US-5,745,231	04/28/1998	Groger et al.	
		US-5,811,312	9/22/1998	Hasegawa et al.	
		US-5,822,472	10/13/1998	Danielzik et al.	
		US-5,846,842	12/8/1998	Herron et al.	
		US-6,127,183	10/3/2000	Ivarsson et al.	
		US-6,136,611	10/24/2000	Saaski et al.	
		US-6,395,558 B1	05/28/2002	Duveneck et al.	
		US-6,455,004	09/24/2002	Tiefenthaler	
		US-			
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		WO 95/03538	2/2/1995	Balzers Aktiengesellschaft		

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of US PTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/710,609
		Filing Date	7/23/2004
		First Named Inventor	Tiefenthaler
		Art Unit	
		Examiner Name	
Sheet 2 of 2	Attorney Docket Number	FREI.P-041-DV-2	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		DUBENDORFER ET AL., Reference pads for miniature integrated optical sensors, Sensors and Actuators B, , Page(s) 116-121, Volume 38-39, Publisher: Elsevier Science S.A.	
		DUBERDORFER ET AL., Compact integrated optical immunosensor using replicated chirped grating coupler sensor chips, Applied Optics, , Page(s) 1890-1894, Volume 37, Number 10, Publisher: 1998 Optical Society of America	
		KUNZ ET AL., Replicated chirped waveguide gratings for optical sensing applications, Sensors and Actuators A, , Page(s) 482-486, Volume 46-47, Publisher: Elsevier Science S.A.	
		LUKOSZ ET AL., Output Grating Couplers on Planar Waveguides as Integrated Optical Sensors, , Volume 11141, Publisher: 5th European Conference on Integrated Optics: ECIO '89	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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